




LEGAL TECH AND SOCIAL INCLUSION: EVIDENCE ON THE JUSTICE GAP IN THE UNITED STATES

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ABSTRACT

The justice gap in the United States reflects the structural inability of civil and criminal legal institutions to adequately meet the legal needs of low-income and vulnerable populations. Scholarship consistently demonstrates that a substantial proportion of civil legal needs among economically disadvantaged groups remain unmet or only partially addressed. This article conducts a structured literature review examining empirical and normative research on the role of legal technology in mitigating these structural barriers. Findings indicate that digital self-help tools, AI-assisted systems, online dispute resolution (ODR) platforms, institutional interoperability mechanisms, and digital pro bono initiatives possess the potential to expand informational access, procedural efficiency, and geographic reach. However, such effects are conditional upon inclusive design, regulatory oversight, interoperability standards, public investment, and sustained digital inclusion policies. Legal technology does not operate as an automatic equalizer but as an institutional variable whose distributive impact depends on governance architecture.

Keywords: Legal Technology. Access to Justice. Digital Inclusion. Artificial Intelligence. Online Dispute Resolution.



1 INTRODUCTION

The justice gap refers to the systemic disparity between the legal needs of the population and the capacity of the justice system to provide effective assistance. In the United States, this gap is particularly evident in civil matters involving housing, family law, consumer protection, employment, and access to public benefits. Scholarship consistently indicates that the problem extends beyond attorney scarcity and includes structural barriers such as procedural complexity, cost asymmetries, geographic concentration of legal services, and informational inequality [1,2].

Traditional legal service delivery models rely predominantly on in-person representation and court-based infrastructure. While effective in certain contexts, these models exhibit limited scalability and struggle to address high-volume demand. Within this structural constraint, legal technology has emerged as a potential systemic intervention capable of lowering transaction costs, automating standardized processes, and expanding access to basic legal information [1].

At the same time, the justice gap must be understood as both a distributive and institutional phenomenon. It reflects not only unmet legal needs but also unequal capacity to navigate formal procedures, interpret legal language, and engage with court systems effectively. Individuals experiencing poverty, limited digital literacy, language barriers, or distrust in institutions often face compounded disadvantages when interacting with legal systems [2,3]. As a result, access to justice cannot be reduced to formal availability of services; it also depends on usability, comprehensibility, and procedural fairness.

However, critical scholarship cautions that technological innovation alone cannot eliminate structural inequality and may, under certain institutional conditions, reproduce or exacerbate existing asymmetries [2,12]. Therefore, the central analytical question is not merely whether legal technology can reduce the justice gap, but under what regulatory, institutional, and governance conditions it can contribute to distributive justice.

This study adopts a structured literature review approach. Peer-reviewed scholarship, legal academic publications, and interdisciplinary research published between 2016 and 2025 were analyzed, focusing specifically on U.S.-based applications of legal technology and their impact on access-to-justice outcomes.

- The selected studies were organized into four principal analytical domains:
- Digital self-help tools (automated forms, chatbots, document generation);
- AI-assisted systems for self-represented litigants (SRLs);



- Institutional technologies supporting public defense and public-interest advocacy;
- Digitally mediated pro bono platforms.

Cross-cutting themes included digital exclusion, algorithmic bias, interoperability between judicial systems and platforms, and regulatory coordination [11–14]. A thematic comparative synthesis was employed to identify convergent patterns and critical divergences within the literature.

Digital self-help tools represent one of the most mature segments of legal technology. Automated forms and legal chatbots enable individuals to diagnose legal problems, receive personalized information, and prepare basic documentation without direct attorney assistance [1,10]. In standardized legal contexts—such as small claims or administrative petitions—these tools may reduce informational asymmetries and improve initial procedural engagement.

Nevertheless, distributive effectiveness is constrained by linguistic barriers, functional illiteracy, limited digital literacy, and concerns related to unauthorized practice of law [2,12]. Without plain-language interfaces and human support mechanisms, such technologies may disproportionately benefit users with higher educational capital, thereby limiting inclusive impact.

AI-assisted legal systems and ODR platforms extend self-help functionality by providing online triage, negotiation support, mediation, and procedural guidance [5,6]. During crisis conditions, including public health emergencies, digital court platforms demonstrated the capacity to maintain essential dispute resolution functions remotely [6].

However, reliance on digital infrastructure and the potential opacity of algorithmic decision-making introduce risks related to fairness, accountability, and due process [12,13]. Insufficient human oversight may lead to automated outcomes without adequate transparency or avenues for contestation, thereby undermining procedural legitimacy.

In the criminal justice context, digital forensic laboratories, case management systems, and evidence-processing technologies have the potential to strengthen defense capacity and reduce evidentiary asymmetries [3]. Yet adoption remains uneven. Resource disparities between prosecution and defense offices may reinforce structural imbalances if technological integration occurs asymmetrically [3,8]. Absent sustained public funding and standardized technological frameworks, innovation risks consolidating institutional advantage rather than democratizing access.



Digital pro bono initiatives expand geographic reach by connecting volunteer attorneys with underserved communities, particularly in rural regions [9]. Virtual legal clinics and online matching systems reduce logistical barriers and facilitate cross-jurisdictional service provision. Nonetheless, demand continues to exceed available supply. Furthermore, reliance on stable internet access and digital literacy may exclude individuals facing the most significant infrastructural deficits [11].

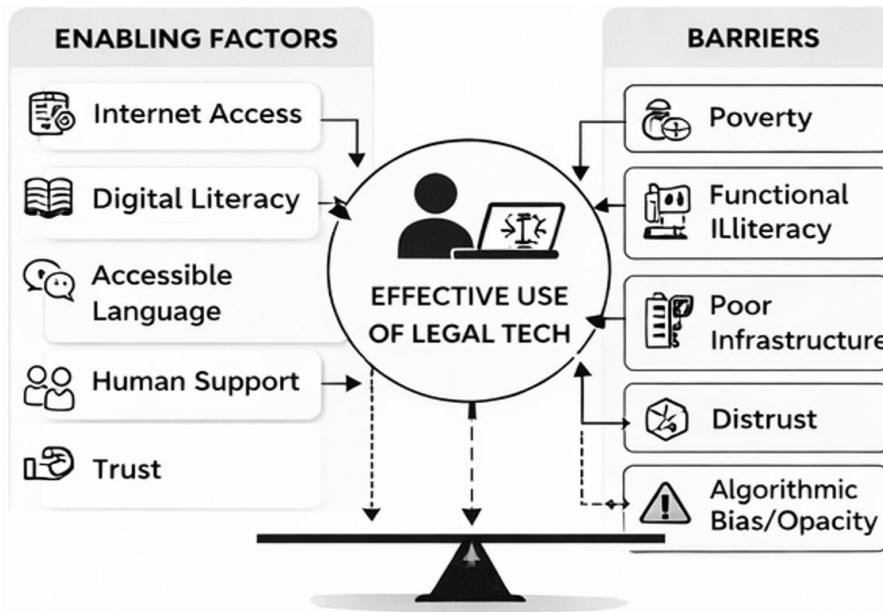
The literature consistently identifies digital inclusion as a prerequisite for equitable technological impact [11]. Effective use of legal technology depends not merely on the existence of digital tools, but on the broader socio-technical environment in which they are deployed. Access to stable internet infrastructure, adequate digital literacy, accessible language interfaces, culturally responsive design, human support mechanisms, and institutional trust collectively determine whether individuals can meaningfully engage with legal platforms. Without these enabling conditions, the formal availability of technology does not translate into substantive access to justice.

Digital inclusion must therefore be understood as a layered construct encompassing infrastructural, cognitive, linguistic, and relational dimensions. Infrastructure alone is insufficient if users lack the skills to navigate digital interfaces or interpret legal terminology. Similarly, user-friendly design cannot compensate for distrust in institutions or fear of data misuse, particularly among marginalized communities [2,11]. Empirical research on justice-involved populations indicates that smartphone access does not automatically ensure procedural comprehension or effective participation in legal processes [11].

As illustrated in Figure 1, effective use of legal technology is shaped by enabling factors—such as internet access, digital literacy, accessible language, human support, and trust—and constrained by structural barriers including poverty, functional illiteracy, inadequate infrastructure, institutional distrust, and algorithmic bias or opacity. These factors interact dynamically: structural poverty may limit connectivity; limited connectivity may reduce digital literacy development; low literacy may amplify vulnerability to opaque algorithmic systems. In this sense, digital exclusion operates cumulatively, reinforcing preexisting inequalities rather than functioning as an isolated constraint. Addressing these interdependent barriers is therefore essential for ensuring that technological innovation contributes to equitable justice outcomes rather than stratified access.

Figure 1

Factors of Digital Inclusion & Exclusion in Legal Tech Adoption



Source: Created by author.

Regulatory coordination and interoperability frameworks also play a central role. National regulatory sandboxes and coordinated oversight mechanisms have been proposed to balance innovation with consumer protection [12]. Interoperable legal AI systems may enhance systemic efficiency, but they also require clear governance standards to prevent bias automation and data concentration [12–14].

The cumulative evidence suggests that legal technology does not operate as an autonomous equalizer. Rather, it functions as an institutional amplifier. In well-funded, well-regulated environments with inclusive design standards, technology enhances access and procedural efficiency. In structurally unequal systems lacking oversight and inclusion safeguards, it may reinforce disparities and concentrate institutional power.

Legal technology should not be conceptualized as a purely technical solution to the justice gap. Its impact depends fundamentally on the institutional and regulatory conditions governing its deployment. When integrated with inclusive design standards, coordinated regulation, interoperability frameworks, and sustained investment in digital literacy and infrastructure, legal technology may contribute meaningfully to distributive justice [2,12,16].

Conversely, absent such safeguards, technological integration risks reproducing structural inequalities and consolidating power among already advantaged institutional



actors. The central policy question is therefore not whether legal technology should be adopted, but under what governance architecture it can promote equitable access to justice.

Importantly, the long-term effectiveness of legal tech initiatives depends on continuous evaluation, empirical monitoring, and adaptive regulatory oversight. Institutional learning mechanisms must accompany technological deployment to assess distributive outcomes, unintended consequences, and differential impacts across demographic groups. Future policy efforts should prioritize interdisciplinary collaboration between technologists, legal scholars, courts, and community stakeholders to ensure that innovation aligns with principles of transparency, accountability, and procedural fairness. In this sense, legal technology represents not merely a tool for efficiency, but a governance challenge that requires sustained public engagement and normative commitment to equity.

REFERENCES

1. Barton, B., Estreicher, S., & Radice, J. (2016). Technology can solve much of America's access to justice problem, if we let it.
2. Brescia, R. (2018). Using technology to improve rural access to justice.
3. Filho, A. W. B. N. (2025). Analyzing the relationship between collections management and corporate financial stability: A review of the literature. *Brazilian Journal of Development*, 11(8), e81864. <https://doi.org/10.34117/bjdv11n8-057>
4. Gotardi Pessoa, E. (2025). Analysis of the performance of helical piles under various load and geometry conditions. *ITEGAM-JETIA*, 11(53), 135–140. <https://doi.org/10.5935/jetia.v11i53.1887>
5. Gotardi Pessoa, E. (2025). Sustainable solutions for urban infrastructure: The environmental and economic benefits of using recycled construction and demolition waste in permeable pavements. *ITEGAM-JETIA*, 11(53), 131–134. <https://doi.org/10.5935/jetia.v11i53.1886>
6. Implications of digitalization and AI in the justice system. (2024). *Law and World*.
7. Javed, K., & Li, J. (2025). Bias in adjudication. *PLOS ONE*, 20.
8. Magassa, L., & Friedman, B. (2024). Toward inclusive justice. *ACM Journal on Responsible Computing*, 1, 1–30.
9. Mittana, R. (2025). Improving access to justice: AI-enabled legal assistance for self-represented litigants.



10. Mjadu, L. (2025). Leveraging legal technology to enhance legal awareness and access to justice in underserved communities.
11. Morgan, G., Smith, L., Walker, C., & Taxman, F. (2025). Digital justice. *Prison Journal*, 105, 131–151.
12. Neves Filho, A. W. B. (2020). Entrepreneurship in collections: Challenges and opportunities in managing diversified client portfolios. *Revista Sistemática*, 1(1). <https://doi.org/10.56238/rcsv1n1-007>
13. Ramirez, F. (2022). The digital divide in the US criminal justice system. *New Media & Society*, 24, 514–529.
14. Rostain, T. (2019). Techno-optimism & access to the legal system. *Daedalus*, 148, 93–97.
15. Schlievert, E. (2024). Understanding U.S. attorneys' use of technology following the COVID-19 pandemic.
16. Schmitz, A., & Zeleznikow, J. (2021). Intelligent legal tech to empower self-represented litigants.
17. Simshaw, D. (2025). Interoperable legal AI for access to justice.
18. Simshaw, D. (2025). Toward national regulation of legal technology.
19. Sourdin, T., Li, B., & McNamara, D. (2020). Court innovations and access to justice in times of crisis. *Health Policy and Technology*, 9, 447–453.
20. THE impact of professional experience on collections management: How seventeen years in the field shape decisions and strategy effectiveness. (2022). *International Seven Journal of Multidisciplinary*, 1(2). <https://doi.org/10.56238/isevmjv1n2-021>
21. Vinson, K., & Moppett, S. (2018). Digital pro bono. *St. John's Law Review*, 92, 551.
22. Waldman, E. (2020). How mediation contributes to the justice gap. *Fordham Law Review*, 88, 2425.